Why Fiberglass?

There are many benefits to using fiberglass as a ballasted racking system. Fiberglass has a remarkable strength to weight ratio when compared to other materials. Pound for-pound Fiberglass is stronger than sheet metal, steel and aluminum. Fiberglass is about 70% the weight of aluminum on a density basis.

The use of fiberglass reinforced thermosetting resin builds structural strength directly into the Evolution as opposed to a standard injection mold or non-reinforced thermoplastic. Glass reinforcement is aligned along the stress points of the basket for added rigidity, support, and durability.

Compression molded fiberglass allows for desired features to be pressed into the product in a one-step process. Engineers designed the Evolution FR to be aerodynamic, promote water drainage on the roof, nest like plastic cups, and mesh seamlessly with all roofing materials.

Fiberglass is non-conductive and fire resistant. The thermosetting resin used inherently has a low thermal expansion coefficient and a broad useful temperature range. To put it simply, the Evolution FR will not expand and contract on the roof through heat cycling. A metal racking system through heat cycling repetitiously expands and contracts causing damage to a roof membrane.

Fiberglass is chemically inert. It is non-reactive with roofing materials, and does not corrode or rust. Fiberglass provides peace of mind in all environments and weather conditions. It's lifespan is not affected by extreme temperature fluctuations, salty or humid air, sun, wind, acid rain or heavy snow.

In summary, the DynoRaxx Evolution FR professional ballasted racking system **WILL NOT:**

- Rot
- Corrode
- Warp
- Contract
- Expand
- Rust
- Dent
- Bow
- Shrink
- Twist
- Blister
- Split
- Crack
- Deteriorate
- Distort
Our Fiberglass

- Manufactured in a tightly controlled process called sheet molded composite (SMC)
- Glass fibers are chopped into 1” lengths and compounded into the resin paste on automated continuous machines in a temperature and humidity controlled room.
- The resin used is a thermosetting polyester. It is the same resin used for automobile body panels, fireman’s helmets and personal watercraft hulls and decks. The resin is strong, stiff and very durable.
- The resin paste is formulated for outdoor service with non-chalking UV additives and both titanium dioxide and carbon black pigments to stop UV attack at the surface.
- The material has less than 1% water absorption and is impervious to freeze-thaw degradation.
- The composite is molded in hardened steel tools at 300 °F and 1000 psi causing a chemical reaction called cross-linking to form the finished part. Once formed the part cannot be melted or reformed.

Other Fiberglass Application

- Wind Turbine Blades
- Automobile Body Panels
- Boats
- Minesweeper Hulls
- Heavy Trucks
- Radomes
- Military Vehicles, Helmets & Armor
- F1 Race Car Chassis
- Homeland Security Guard Posts
- Marine and Coastal Buildings
- Chemical Processing Structures
- Cooling Towers
- Fireman’s Helmets
- Corrosive Chemical Pumps, Valves, Piping and Tanks
- Hazardous Material Storage